ioneer Tiehm's Buckwheat Regulatory Workshop

July 20, 2020 - Carson City, NV

Bernard Rowe President Providing the materials for a sustainable & thriving planet.

IONEER'S VOLUNTARY PROTECTION ACTIVITIES

- Ioneer's presence and commitment to BLM regulation ensures the buckwheat receives constant monitoring and protection from external threats such as wildfires, grazing and recreationists
- If the Project does not move forward, those external perils will still exist; however, the company's continued research, monitoring, and voluntary protection activities will cease and add uncertainty to Tiehm's buckwheat existence

IONEER'S VOLUNTARY PROTECTION ACTIVITIES

- Ioneer has developed a protection plan for the Tiehm's buckwheat that has been reviewed and commented upon by the BLM, NDF, USFWS as well as multiple experts in the field
- Ioneer believes that an NDF Nevada takings permit could not result in any additional protection to the buckwheat
- loneer's voluntary measures which include genetic research, propagation and seeding studies, pollinator research, and planting would cease if loneer does not proceed

DORMANCY PERIOD FOR TIEHM'S BUCKWHEAT

- During its dormancy period (September – April), Tiehm's buckwheat is difficult to spot and identify due to its dormant habit
- Dormancy makes it particularly susceptible to damage from wildfire, vehicle damage, wildlife and cattle



THE RHYOLITE RIDGE PROTECTION PLAN IS ALREADY BEING IMPLEMENTED

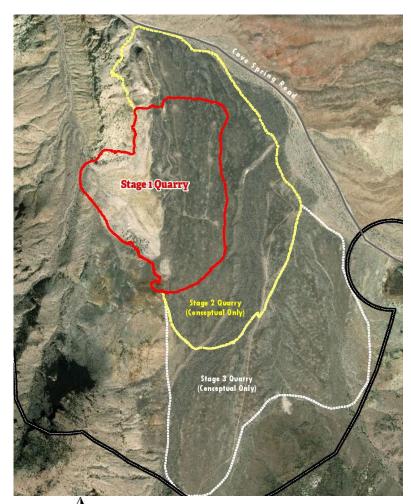
Measure	Progress
Avoidance	 ✓ Incorporated into Stage 1 Project Design ✓ Fences have been erected around sites where seedlings planted ✓ Signs are being installed around seedling sites
Habitat Preservation Model	✓ Created and was used when seedlings were transplanted
Seed Collection and Banking	✓ Obtained in Fall 2019 and appropriately collected no seed in 2020 given lack of availability
Seeding and Transplanting	✓ Seedlings were transplanted to site in April
Salvage (Relocation)	Pending BLM approval
Monitoring	✓ Ongoing
Pollinator Assessment	✓ Underway
Continued Research and Development	✓ Recent 5-year contract with UNR

IONEER HARMED NO TIEHM'S BUCKWHEAT DURING EXPLORATION

- All exploration activities have been done in accordance with BLM notices
- With three exceptions (where extra precaution was taken and additional approval was sought and received), all activity occurred at a distance greater than 200 feet from any known buckwheat sub- population
- All contractors were briefed daily as to where buckwheat occurs and proper avoidance guidance
- Existing county roads come within close distance of four of the populations (P1,2,3,8) and the roads bisect some of the subpopulations, and have done so for many decades

IONEER PROJECT DESCRIPTION

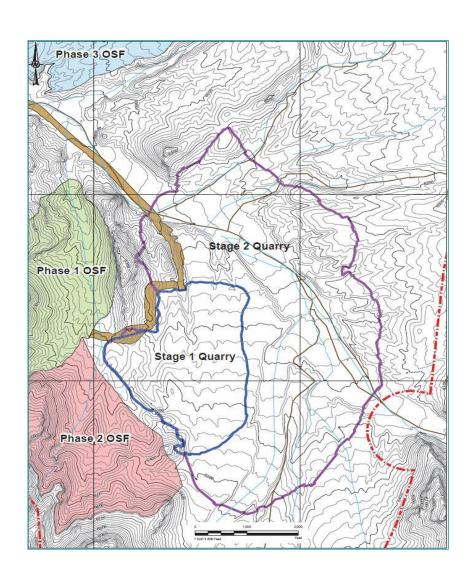
- Ioneer's future planned exploration is focused on areas away from Tiehm's buckwheat
- Ioneer submitted a Project Description to the BLM as part of the Project kick-off meeting in 2019
- Plan includes Stage 1 Quarry, which is located south and west of the county road, away from buckwheat populations 1, 2, 3
- Conceptual Stage 2 and Stage 3 Quarry design expand to the south and west, away from known buckwheat populations
- The Plan Of Operations and Definitive Feasibility Report clearly state the company's intent to expand to the south and east from Stage 1 – but this requires additional drilling before being incorporated into a mine plan and the necessary permits





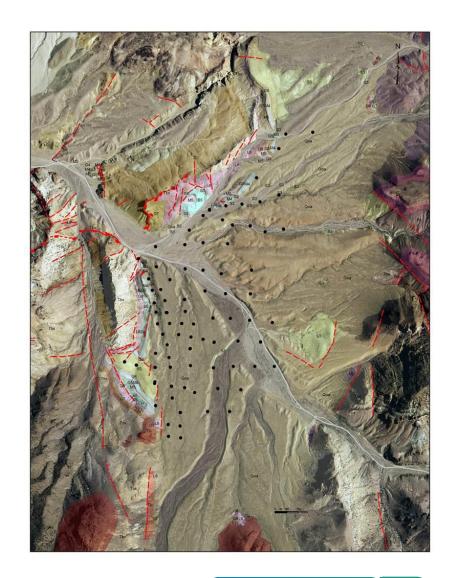
CONCEPTUAL DEVELOPMENT PLANS

- Conceptual quarries are designed to maximize use of known resource
- Over time, based on operations and exploration activity, conceptual mine designs will change
- We have stated that, in any and every case, we will not apply for permits to mine north of the county road until we know that the BLM approved Tiehm's Buckwheat Protection Plan has been successfully implemented



THE PROJECT AND TIEHM'S BUCKWHEAT CAN COEXIST

- Coexistence is illustrated by Tiehm's buckwheat colonizing previously disturbed areas
- Tiehm's buckwheat is present in all areas where trenches were excavated 30+ years ago
- The soil at P6 is low in boron yet plants grow well, which demonstrates that boron is not required for Tiehm's buckwheat to grow



Source: ioneer, internal mapping

THE PROJECT AND TIEHM'S BUCKWHEAT CAN COEXIST

- Current safeguards are already sufficient when coupled with the protection and management plans to be enforced as part of the Mine Plan of Operations
- The protection plan will be enhanced and enforced through a rigorous
 NEPA review process and become legally binding once approved
- Economic impact of proposed new regulation, including what a delay would mean to small businesses, must be considered
- We are dedicated to the protection of Tiehm's buckwheat as demonstrated by our actions to date and the commitments that will form part of the approval conditions
- NDF listing will not result in additional protection and will unnecessarily consume State resources as the plant is protected as a sensitive species under BLM regulations